

# PerformancePC

CANADA'S NEXT GENERATION COMPUTER LIFESTYLE MAGAZINE

## Edifier S5.1 Super Theater System



- Sony Laptop - X505
- Apple's iBook G4 14
- BenQ PB6210 Multimedia Projector
- Personal Home Studio: A Primer
- Quetec ASW2201 PC MCIA-B Wireless Adapter / Access Point

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Canada's Best Performing Computer Magazine

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# Christmas is a comin' and the goose is getting fat...

By Joshua Paul



**G**reetings fellow travelers! Have we got a fun action packed issue for you filled with exciting reviews and contests - perfect for the season of giving! Right now, I'd like to give thanks to all our readers and advertisers for helping make this a successful year at Performance PC! We are now into our 2nd year - and we are excited to have your support - please

keep those letters and phone calls and emails coming - we couldn't do it without you!

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Editor 3210



Editor 1640



Something that totally opens your mind? Something that makes you ask - How did they do that? Go check this out <http://www.bwmedia.ca/zoom.htm> - this Richtomagus flash movie is sure to make your jaw drop.

I was excited in a different way to get a new 40X 512MB compact flash card to replace my old 256MB card. Not only was the new card double the size of my old card, it was 36% faster! I copied a 76MB file to the old card in 36 seconds (1.35MB/s), and the same file to the new card in 41 seconds (1.85MB/s). That may not seem like much, but when you've got a full 512MB card, the savings 379 seconds - 276 seconds = 103 seconds savings!

Also there's some free software for your windows box (that Mac users have built in) you should know about. Cute PDF and Alcop. Cute PDF Writer is a free PDF printer available from <http://www.ctetpdf.com/> - it works great - no ads and no spyware. Another tool I can't live without is Alcop available from <http://www.alcop.com/>. Finally a free ace, zip, rar, gzip, tar tool for windows that is totally free and doesn't have ads.

Enjoy the issue and holidays and see you in the new year! ☺

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# MediaSonic Bluetooth Dongle

By Bobak Khosravi

**B**luetooth devices are popping up everywhere. Almost any sensibly designed computer or electronic communication unit is now equipped with Bluetooth. Any electronic unit that uses cables to connect to another device to transfer information can do the same job better with Bluetooth. Before Bluetooth was conceived, cables were needed for everything. Connecting a digital camera to a computer to download pictures? A special cable was required that would match both the camera and the computer ports. How about cell phone to computer? Or cell phone to camera? Or just computer to computer? The possibilities are limitless.

But imagine if you had a digital camera, a cell phone and a computer, and you wanted to have those three connected. This would need four cables. If a friend came over with their cell phone, and you wanted to connect to them, a whole set of different cables would be needed.

Bluetooth is a beautiful replacement to all these cables. It's a technology that uses radio frequency to connect two devices together. No more cables.

## Communication Protocols:

When connecting two devices together, a protocol needs to be met by both devices and the means of communication. In the case of Bluetooth, the means of communication is radio frequency. The frequency that has been assigned to Bluetooth is 2.4GHz. This is the same frequency that is assigned to most cordless phones. When a device is not connected to any network, it is said to be in "standby mode." When the device tries to connect to another Bluetooth device, it needs to ask

for permission. Once connection is established, transfer of files between the units is so easy.

Unfortunately, even though Bluetooth is so practical and important, manufacturers are still shipping devices that are not Bluetooth enabled.

Bluetooth Dongle to the rescue.

As yet, Bluetooth is still considered an optional feature. But all is not lost. There are ways to convert or give the ability for your device to become Bluetooth enabled. Bluetooth USB dongles are the most common way to allow your computer to have Bluetooth.

There are so many different brands out there I had the chance to try out MediaSonic's Bluetooth dongle. I was very pleased with it. The dongle costs around \$40. The casing is a nice stylish dark purple. Setup was extremely easy. I installed the software, and when prompted, inserted the dongle into the USB port. A few moments later, my computer was Bluetooth enabled. A small icon appears on your task bar. When you click on it, it asks you if you want it to search for other Bluetooth devices in range. I have seen Bluetooth devices that can be detected as far as 20m away! After the devices in range are detected, you are prompted to connect with that device. This is the great thing about Bluetooth. Everything has to be authorized on both devices, so you can't get someone sitting in a coffee shop next to you and they connect themselves to your cell phone and download your pictures without you knowing about it.

Once you click on Connect to Device, you are prompted for an authorization password on both your device, and your main computer.

I used two Bluetooth dongles to share internet from one computer to another. I have to admit, I had to show a lot of patience, because I just couldn't get it working, but once the two computers established connection and they knew what they were sharing, everything was a breeze. I had one desktop connected to the internet, and I was walking around the house with my laptop, with complete access to the internet via Bluetooth.

## Conclusion:

The Bluetooth dongle is an inexpensive alternative way to gain Bluetooth capabilities without having to replace all your devices with Bluetooth enabled gear.

For additional information contact Wayne Ching at MediaSonic 604 276-1619 [www.mediasonic.ca](http://www.mediasonic.ca)

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# Sony Ericsson

**R**ecently everywhere you look, you see companies trying to cram features after feature into one single unit. I get sent these units to review. But after some time, I see that the quality of the features is just not good enough to replace my own stand alone gadget. Best example is camera phones. They are great to play around with, but until recently there was no way I would ever replace my digital camera for one.

Then, Fido sent me the Sony Ericsson P900. I admit this is still a little on the bulky side, but what they have packed into this unit can truly replace my stand alone units. This is a stand alone PDA with a nice large screen, hand writing recognition, both Bluetooth and IrDA, voice recorder, MP3 player, and memory slot. The OS is Symbian OS 7. There are many programs that you can download and install for this OS. You can even have MSN messenger and chat with your buddies as you would on a regular computer ([www.mysymbian.com](http://www.mysymbian.com)). On top of all, the P900 has an integrated camera, and can take pictures or video clips and even play MPEG4 movies.

## Camera

The P900 integrates a 3.2M camera that is capable of recording videos in addition to shooting pictures. The quality is similar with all cameras of this caliber. I suspect that the next model will integrate a 1MP or better camera, which would greatly increase the importance of this feature.

## Internet Browsing

The P900 has both an HTML and a WAP browser. With the HTML browser, you can download full pages that have been automatically shrunk to fit your screen, and with the WAP browser, you can access all the sites that are specifically made for mobile and smart phones.

## Input

The P900 keypad is comfortable to use. The keypad covers half the screen and when flipped open the phone transforms into a full on PDA. The keys look small but give a good solid feeling when depressed. When the keypad is



# P900

By Babak Khanmari

open, you can enter text using the touch pad screen and the stylus.

## Phone

As a phone, I found the nice big screen very helpful in going through my contacts and list calls. Managing calls is simple and intuitive, even juggling conference calls is not a problem. The speaker-phone is very nice for noisy places or places that you need your hands free. The P900 adds a simultaneous speed dial option. The best part about this is the ability to load pictures to be associated with each person. So very quickly you can tap a person's image and the call

will begin. The MP3 ring tones enable you to download almost any MP3 song into your unit and use that as your ring tone. This flexibility allows the user to download the mp3 file without having to go through the server, and paying the \$2 fee for a 15 second audio file. The P900 is a tri-band phone, so you can use it in different countries.

## Conclusion

The beauty of this unit is the smooth integration of all the quality features. Record a video clip and email it right away, or take a picture and SMS it to a friend. Go online, and check the price of something and then call a friend to tell them about it. Transfer a movie that you downloaded from the net into your P900 and watch it while having coffee or transfer your songs from one PDA to another through your IrDA port. If you are looking for a perfect combination of PDA and phone, I recommend getting the P900. The P900 can be bought for around \$400 through FIDO ([www.fido.ca](http://www.fido.ca)).

## PROS:

Looks great, reliable, sync capability with Outlook and Lotus organizer, display, intuitive design, mp3 ring tones, speakerphone capability, excellent connectivity for e-mail, sms, and more, Bluetooth, infrared and cable, decent battery life, tri-band, full on PDA, MP3 player, MPEG4 video player, voice recording.

## CONS:

Low resolution camera, cost

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|-----------------------|---|
| Processor speed       | 168MHz  |
| Installed memory      | 12MB  |
| Expansion slot        | Memory stick slot                                       |
| Wireless capabilities | Bluetooth, IrDA   |
| Display               | 262kx176, 16K color LCD                                 |
| Input                 | Touchscreen, touch screen, microphone, jog ball, keypad |
| Audio output          | Built in speaker  |
| Special Features      | Camera, MP3 player                                      |
| OS                    | Symbian OS 7.0  |
| Camera                | 3.2M by 480 camera                                      |
| Price                 | \$400 through Fido                                      |
|                       | \$400 with a contract                                   |



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# Sony Laptop - X505

By Babak Khosravi

To make the world's thinnest and lightest laptop, Sony engineers decided on making the case from carbon fiber material. Carbon fiber is commonly used in making high-end bicycles. It is an incredibly strong material, less than a fraction of the weight of other metals. The only catch is, though, Sony has successfully developed a material that is not only the thinnest and lightest, but also adds the internal components while hardly making any noise. Having as many external peripherals as possible is the key to making this unit so slim and at the same time cut the heat the system produces.

## Display and Keyboard

Though the X505 is thinner and lighter than most of the other laptops and notebooks in this class, the screen has not been reduced in width or height, appreciatively. The display is driven by an Intel 855GM integrated graphics chipset with 64MB of shared memory. It is capable of 1024 X 768 resolution. The screen is better than average, but not as nice as some of the screens produced by Apple or even the Sony models that use the

## Strike display

The keyboard is relatively the same size as other keyboards in the same class. The Japanese version of the X505 comes with a optical mouse and the Canadian version comes with a precision device embedded in the keyboard. It took some time going used to the pointing device, since I'm

## Specs:

|   |   |
|---|---|
| CPU:  | Intel Pentium 1.6Gz                                   |
| RAM (std-max):  | 512MB   |
| System Bus:   | 400MHz  |
| Cache:  | primary 64K, secondary 1MB. CPU built in              |
| HD:   | 20GB  |
| Display:  | 16" TFT build w/ Intel 1024 x 768                     |
| Ports:  | FireWire, 2 USB, PCMCIA slot, stereo headphone output |
| Video port(s):  | AGP/PCI support and 64MB of VRAM                      |
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| Power consumption:  | 24W   |
| Weight:   | 2.1lbs  |
| External material:  | Carbon fiber  |
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| Comes with a 802.11b/g combo PC card, optional Ethernet/USB net adapter in the form of an external dongle |   |



Continue on page 30

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## HP Compaq NX9500 Desktop Replacement Laptop

### The Global Network

This series of laptops is called, "desktop replacement laptops", and the name definitely describes the units. In the next notebook comparison, we'll compare

In the past, notebook computers were primarily marketed and sold to users who needed a lightweight machine to carry with them during frequent travel. It seems that manufacturers are finding that heavier, larger desktop replacement notebooks offer just as many revenue opportunities. The laptop is large, one of the biggest laptops I have seen. It's big and heavy. Just the adapter alone weighs a good 4 lbs. In terms of performance and mobility around home, it's perfect. The NX9500 has a 17-inch widescreen display with a WGA resolution of 1440x900 pixels. The display is driven by an NVIDIA GeForce FX Go5700 graphics accelerator with either 64 MB or 128 MB of memory.

As I am writing this article on the N395500, I have the unit on my lap, it's been on for the past week nonstop. The bottom is mildly warm. My own laptop, would take only 20 minutes to get so hot that you could cook eggs on it and thus wait in line it's just been turned on a few minutes ago. Everything from the screen to the keyboard to the tracking pad and to the sound is top notch. I switched a couple of DVD's on the laptop and I was mesmerized by the quality of the sound and video.

## Investment opportunities

The NX9500 has expansion slots for memory sticks and SD cards to meet the demands of today's market. There are also four USB, and one PCMCIA card slots. There is also an infrared port, which I found very useful to sync the laptop with my PDA, Firewire, external monitor and S-Video out, plus a bi-directional conflict port.

**Abstract**

The battery life leaves a lot to be desired. I would expect the unit after the battery was charged and would do either some video editing or just simple programming for 15 minutes or so. The battery meter would register charge down to 80-85%. This would translate into perhaps a 2-hour charge. Most similar units have a 6-hour battery charge life.

Figure 1

I had absolutely no problems with this "desktop replacement laptop." I even did some video editing and Photoshop at the same time and still I did not feel any loss in performance or speed. The wide screen is just wide enough to open two windows side by side fully enough to see full contents of both windows. As for the sound, the speakers are powerful and the sound that is pumped out is amazing. It's truly a multimedia computer and entertainment center.

[illegible]

## Conclusion

You definitely get the performance of a high-end desktop from the N39500. The memory can be expanded to 2 GB, which is plenty for at least another couple of years. From the feel and look of the unit, it is sturdy built and it can definitely be a workhorse computer. The N39500 is the perfect machine for users who travel infrequently or sometimes work from remote locations. It offers mobility without sacrificing power. Like I mentioned before, I have had the N39500 on for the past week, nonstop and I've had no crashes, the heat is minimal, and the fans are whisper quiet. Price may be a factor for some consumers. This unit is both a laptop and a desktop in one compact and practical design. It's portable and powerful. I had no problems with it whatsoever. I can definitely recommend the N39500 if you are in the market for a computer that has the power/performance of a desktop with the option of occasional portability.

**Pitt**

Super quiet fans, very good cooling system, wide 17-inch screen. Harmon speakers. CD burner.

**Conclusions**

Price, size and weight (though compact and light compared to a desktop), very sensitive touch pad, sometimes the cursor just jumps to a different place. Low battery charge life, about 2 hours. **B**



## Quetec ASW 2201 PCMCIA-B Wireless Adapter / Access Point

*By Joshua Paul*

Contact: Nick Pao  
Vice President  
Quetec Wireless Inc.  
Office : 1-800-434-2883  
Cell : 1-735-330-0425  
Fax : 1-800-434-2887  
 tollfree : 1-877-622-8453 Ext. 1  
[www.quetec.ca](http://www.quetec.ca)

Model Quetec ASW 2201 PCMCIA-B Wireless Adapter / Access Point  
MSRP: \$99 CAD  
[http://www.quetec.ca/products\\_c/pcmcia.htm](http://www.quetec.ca/products_c/pcmcia.htm)  
Software Requirements: Pentium III 150+ or above system, Memory: 128MB  
RAM, Windows® Me, 2000, and XP

**H**ow many times have you wished you had a wireless access point handy so you could network with a friend or colleague or a client? At the moment the wireless network cards installed in our notebooks, or as USB devices or PCI cards are only clients - they can only connect to a wireless network - they can't create them. But wait the technically savvy among you might say, what about ad hoc mode - the built in ability to share network - isn't that the same as creating networks? If you are technically savvy you know that many people aren't - and I am sure you have faced the frustration dealing with users that just want the technology to work. I can't imagine getting people to change their wireless settings to ad hoc and being able to remember to set them back - that's like asking people to set up multiple POP3 email accounts in their Outlook - or like back in the old days having multiple PPP connection settings - most people can't handle it. A reasonable wireless networking solution should be seamless - and that's what I found in the Quetec PCMCIA Wireless.

So let's look at an example we someone that prevented itself the day before I finished writing the review. One of our staff that works from home needed to come work at the office. He shows up with his laptop finds a desk to work at and he's all set to go! Wrong. There's no available ethernet jacks left and we don't have any hubs or switches left (it's amazing to me how switches have become like powerbars) what are we going to do? Nothing. He had already connected to the internet through the Quetec PCMCIA Wireless card I

had just finished installing in the Sony PCG-TR3AP for this review. Amazing! What an easy useful product!

To install this product I visited the web site <http://www.quetec.ca>, clicked Downloads and downloaded their Combo Driver. Of course, drivers were on the provided CD, but I prefer to get the latest driver, I find it usually saves me time in the long run. Installing the driver was extremely easy. The installation program intelligently discovered my wired connection, and built a networking bridge between the wired connection, and shared it with the wireless connection - all automatically (as Gracine Bernier would say - in French!). Once it was done I was sharing my wired connection through my Quetec Wireless card and a new tray icon announced that a client had associated itself.

Using the Quetec software in the system tray I have all the options I am used to seeing when configuring a wireless access point, the SSID (the name of the wireless access point), the encryption type (none, WEP Open Key, WEP Personal TKIP), and channel to broadcast on. In addition there is a tab to pick which network connection you want to share with the wireless connection - typically this will be your "Local Area Connection" (ever hear of anyone doing FireWire networking? it's possible...) Finally there is a tab to allow or deny access by MAC address - this is the permanent identity of your network card - except it is of course possible to spoof this. A really nice feature is the ability to scan the wireless clients out there that are trying to connect. If you have ever configured this featured on a stand alone wireless access point from DLink, Linksys or SMC you'll realize what a handy feature this is - I don't enjoy typing in the 6 hex pairs that make up the MAC address.

My only complaint is why didn't they have this out sooner! Having a regular wireless connection is like having a cd player - of course it's useful - but it makes you want a cd burner so you can make your own. Finally you can easily and painlessly make your own wireless networks everywhere you go. Some people that want the latest of everything might complain that this is 802.11b and not the faster 802.11g - that's like some people preferring to have a DVD player or a CD burner. I totally understand - but for me I want the ability to make my own and I would rather sacrifice speed for the ability to make networks. **B**

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# Edifier S5.1 Super Theater System

By Joshua Paul

Here is the ultimate computer accessory Christmas gift! About 2 years ago I bought some Cambridge Soundworks speakers, they are not surround sound speakers but I've been very happy with them. I've been looking forward to reviewing some surround sound speakers for some time.

So when Douglas Ip, local supplier of Edifier speakers, showed up with two giant boxes for us to review, I was pleased. The boxes, when stacked on top of each other are about the same size as a 19" CRT monitor box. I thought he had brought us two sets to review. But inside one of the boxes was the sub woofer / amplifier, and in the other were the 5 speakers.

Now from my own "exhaustive" research in a big box retailer (looking at a new TV) I have seen surround sound packages being offered from Logitech, Yamaha and Pioneer, for between \$399 and \$395. The Edifier system set is in a different class altogether! Definitely the gold wrapping paper for under the tree, please! The satellite speakers are good looking wood grained speakers in a full MDF wood enclosure, not the small plastic speakers offered by other vendors. In addition all the satellites have larger than usual 4

Contact: Douglas Ip  
Edifier

Box 10, 3611 Wilson Hwy Richmond, VA  
804 332-5337 x884  
<http://www.edifier.com/>  
doug@edifier.com

Model Edifier S5.1 Super Theater System  
MSRP: \$380.00

<http://www.edifier.com/edifier/s5.1.htm>

Requires: 100W Subwoofer or subwoofer with support for 5.1 sound

performancePC

Computer Performance

inch mid-range drivers and 3/4 inch cloth dome tweeters - not the single drivers that other systems offer. Specifically, similarly priced offerings from other vendors have a single 2.5" driver without the tweeter.

And best of all - this system sounds fabulous. The 2 way speakers plus the separate sub woofer make all the

difference. For my test I played *Romeo Total War*, and *Age of Mythology Gold Edition*, first using my single driver Cambridge Soundworks, and then using the Edifier S5.1 Super Theater System. I know it's like comparing a muddy puddle to a bottle of Perrier - but let's face it - most of us still have old 2 speakers systems and want to know why we should spend the \$380 to upgrade.

Let's cut to the chase - the reason to upgrade is - I was startled. Huh? The sound was actually startling. I couldn't believe the realism and clarity of this system compared to my old 2 speaker system - the only comparison I can make from an audio standpoint is to compare AM to FM - it's a whole different experience.

To set itself further apart from the competition, this system also has an infrared remote to control speaker volume and treble and bass, plus it has the ability to be upgraded to a 6.1 system. So Santa doesn't even have to leave the comfort of his fireplace.

However, a review can't be all positive - but to be fair

Continue on page 26







By Andrew Paton

## Apple's iBook G4 14"

With notebook prices so low, practically everyone can consider buying a notebook instead of a desktop. Of course desktops have the best price / performance ratio – however, I think there is a more important ratio to consider – price / performance / access – and on this score laptops always win.

By factoring access in – what I am trying to consider is how many useful hours a day you will get out of your computer purchase. Laptops win because you can carry them with you and so get more usable hours out of them – whereas a desktop is stuck in one place. Though, if you work all day, and come home to use your computer you might not think it makes a difference. I still think it does – but I like to take my laptop on trips so I can listen to music, or let the kids play games or watch movies.

Apple's iBook is their entry laptop line and is much cheaper than the PowerBook line. For example a 15.2"

PowerBook starts at \$2,649 – \$1,000 more than the iBook version. Of course the Powerbook version has lots of extra goodies – but for most users the iBook covers all the bases.

Compared with the last stylish PC laptops we've seen from other vendors, the Apple iBook's fit and finish is flawless. Apple's G4 processor also achieves much better – this iBook is rated to go 6 hours – but since I turned all the energy settings off I actually only got 4 hours – still much better than PC laptop vendors – that ship their units with inferior batteries and offer extended life batteries for sale. You can tell the design of the unit has been carefully thought through. From the placement of all I/O connections on the left hand side, the slot loading Combo drive – this unit is almost perfectly smooth. I especially like the fact that no cables plugged into the back of the unit.

There's a lot to like about Apple's G4 iBook. Built in modem, 10/100

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Apple Canada  
Toll-Free: 1-800-MYAPPLE  
[www.apple.ca](http://www.apple.ca)

Model Apple's iBook G4 14"  
MSRP: from \$1099 USD  
<http://www.apple.com/na/iBook/>

Base-T ethernet, Airport Extreme, Firewire 400, 2 USB 2.0 jacks, a mini-VGA jack and a headphone jack. The unit I had for testing came with a 60GB drive and 768MB of RAM.

However – my biggest complaint is with the build quality of the LCD – it is not as sharp or as bright as the unit used in the PowerBook series. The LCD in a laptop maybe one of the single most expensive components, so I can understand using a less expensive unit. If I wasn't used to the 17" LCD on my Powerbook the LCD on the iBook wouldn't have bothered me.

### Price:

\$ 9 lbs, 6 hour battery in economy mode, only 1.35" thick, durable feeling

### Cons:

VGA out only supports mirroring – not a bigger desktop by default must apply macports do/iBook patch to fix, no mac rx, single button mouse still drives me crazy ☹

# AMD Socket 939 4000+ and FX55

Review by Jason Jacobs, Techware Labs

Processor Provided by AMD

## AMD's Socket 939

As most are aware AMD launched its Socket 939 processor line a short while ago. This article will cover AMD's latest offering to the Socket 939 line, the 4000+ and the FX 55. The socket 939 processors offered a dynamic increase in productivity and computing power over anything the market currently offered. Additionally the 939 processors are 64 bit compatible and offered a clear upgrade path should Microsoft ever release its 64 bit operating system and 64 bit programs become widely available. Initially the Socket 939 made its debut in performance ratings, the 3800+ and the 3500+.

The 4000+ represents a definite status symbol for AMD as at this point in time Intel has no corresponding 4Ghz part. This fact becomes even more evident in the light of the recent announcement by Intel that it is canceling its 4Ghz part development. When AMD was asked about their performance ratings they responded that the ratings are independent of Intel parts and are rated based upon a percentage increase (determined through testing) in performance over the previous part. Of course we all know that the marketing and PR departments at AMD must be having a field day with this launch. Does the 4000+ live up to its name? Further on we tested it to find out.

Let's take a look at the two new contenders on the block.

## The AMD Socket 939 4000+



### AMD ATHLON 64 4000+ TECH SPECS:

L1 Cache Size: 64KB data + 64KB instruction = 128KB Total  
L2 Cache Size: 1MB (exclusive)  
CPU Core Frequency: 2.40GHz  
CPU to Memory Controller: 2.40GHz  
Memory Integrated 128-bit wide memory controller  
Types of Memory: PC1600, PC2100, PC2700 and PC3200 DDR memory  
HyperTransport Link: 1  
HyperTransport Spec: 2GHz (2x 1000MHz / DDR)  
Effective data bandwidth: Up to 14.4 GB/sec (8GB/sec HyperTransport bandwidth plus 6.4GB/sec memory bandwidth)

Packaging: 939-pin organic micro-PGA

Fab location: AMD's Fab 30 wafer fabrication facility in Dresden, Germany

Process Technology: 130nm (.13-micron) Silicon on Insulator (SOI)

Approximate Transistor count: 105.9 million

Approximate Die Size: 193mm2

Nominal Voltage: 1.50 V

Max Ambient Case Temp: 70 degrees Celsius

Max Thermal Power: 80 W

Max Icc (processor current): 57.4A



### AMD ATHLON 64 FX55 TECH SPECS:

L1 Cache Size: 64KB data + 64KB instruction = 128KB Total  
L2 Cache Size: 1MB (exclusive)  
CPU Core Frequency: 2.60GHz  
CPU to Memory Controller: 2.60GHz  
Memory: Integrated 128-bit wide memory controller  
Types of Memory: PC1600, PC2100, PC2700 and PC3200 DDR memory  
HyperTransport Link: 1  
HyperTransport Spec: 2GHz (2x 1000MHz / DDR)  
Effective data bandwidth: Up to 14.4 GB/sec (8GB/sec HyperTransport bandwidth plus 6.4GB/sec memory bandwidth)  
Packaging: 939-pin organic micro-PGA  
Fab location: AMD's Fab 30 wafer fabrication facility in Dresden, Germany  
Process Technology: 130nm (.13-micron) Silicon on Insulator (SOI)  
Approximate Transistor count: 105.9 million  
Approximate Die Size: 193mm2  
Nominal Voltage: 1.50 V  
Max Ambient Case Temp: 63 degrees Celsius  
Max Thermal Power: 104 W  
Max Icc (processor current): 80A

## A closer look at the 4000+ &

# BenQ PB6210 Multimedia Projector

By Robert Klaczarski

## Specifications:

DLP projection system, 3000 ANSI lumens, 1024x768 resolution, 2000:1 high contrast native 4:3 aspect ratio, 31" to 300" large image size, 60° 2 m wide angle lens, 8 sets of preset mode, whisper quiet 26 db (economy mode)

## Compatibility:

HDTV and computer resolutions up to SXGA (1280x1024), NTSC, PAL, SECAM

## Lens and throw distance:

Manual zoom/focus lens with a 1.2x zoom range. On the PB6210, 100", 4:3 image is measured between 11 and 13 feet. The PB6210 can deliver a large image from any distance, even under constraints of space limitations.

## Connection Panel:

On the back of the unit are all the connections. There is a 15-pin VGA port through which all component and HDTV signals are fed, one S-video port, and one composite video jack. Two big downsides of the 6210 are that it has only S-video and composite inputs. There are no component video inputs. Instead, specific converter boxes and VGA cables can be purchased to complement the system.

## Lamp:

The PB6210 uses a 200W USH lamp with 2000 hours of life in normal mode and 3000 hours in eco-mode. Retail price of replacement lamp is \$400, which is usual.

Only a few years ago, if you wanted to enjoy the richness of a home theater projection system, you would have paid around \$10,000 for a low-end projector. The BenQ PB6210 offers unimaginable picture for a low price of around \$1500. I have been following the DLP market for a while, reading the reviews and checking advertisements, but have never seen an actual DLP projector on display and in use. This might be because in the retail environment these projectors don't display well because of the ambient light.

Home theater choices are still pricey. Your choices are a plasma TV starting at approximately \$3,000, (a 60" can be as much as \$15,000), getting a rear projection big screen TV (which are not very space efficient) or a ceiling mounted DLP projector. The DLP projectors are great for price performance and space efficiency.

The first thing that you notice about the PB6210 is how light it is, it only weighs about 5 or 6 lbs. It is compact and very stylish. Then I thought about the unit's portability, being able to take this to presentations, or to friends and

family visits to watch big screen Cinema from literally anywhere. Set up could not be any easier. It's literally plug and play. The menu system is very intuitive and easy to maneuver around the options. I did not have a proper projector screen to view this unit, so I was using my apartment wall as the background. Still, the picture quality and color were amazingly crisp and clear. I even tried connecting my computer to the unit. No problems there again. This is just an amazing and fun product for watching DVDs and an effective and efficient tool for presentations. I didn't have the unit long enough to know how long term usage would affect the picture quality.

## Performance:

Color accuracy is well above average. While there are better color decoders in more expensive units, there are no obvious errors that I found distracting. Flesh tones looked exceptionally pleasing. I wasn't too impressed with viewing standard TV signals on the PB6210. The picture looked flat. DVD always looks much better than standard TV on any projector, but the performance gap was very noticeable on this unit. The PB6210 is rated at a high 2000 Lum, will the only caution that you should take into consideration is the use of this product in ambient light. You don't need total darkness to use this projector and you'll get excellent picture quality even with some light, but to fully appreciate the richness of color and detail that this machine can deliver, you need to control lighting, especially daytime sun from windows.

## Fan/Heat:

In previous projectors that I have seen, heat and fan noise are always a big issue. On this unit, I found the fan noise to be negligible, in fact as soon as the audio track started, I could not hear the fan at all.

## Conclusion:

The BenQ PB6210 is an impressive machine and delivers excellent value in today's market. It is an economy class projector and so has its limitations and trade-offs. Because of its native resolution, the PB6210 can be used as a projector for computer video games and presentations as well as for DVD and television viewing. The PB6210 performs best with component progressive scan DVD input. Component interlaced signals, as well as, of course S-video and composite are displayed with a significant softening of the image when compared to component progressive. You should therefore order a video cable that will enable you to input component video through the VGA port. This means

## BenQ PB6210

Continued from page 19

either a cable with a 3 RCA jacks on one end and a 15-pin VGA connector on the other, or one with 3 BNCs on one end and a 15-pin VGA on the other, depending on the output configuration of your video source. You will end up with exceptional image quality for the money that you spend. Considering the price/performance aspect, I would totally recommend the PB6210 if you are looking at buying a projector.

## Pros:

- Picture quality: brightness, colors, HDTV support
- True 1024X768 resolution
- Price
- Portability
- Truly like having a cinema at home.

## Cons:

- Replacement lamps expensive
- Some color fading due to DLP projector and ambient light effect

Lack of component video input: the projector features a VGA port through which a component video signal can be sent. However, it requires either a special adaptor or a special cable. ■

## Sony Laptop - X505

Continued from page 18

more comfortable with track pads, but after a while you don't feel the difference.

## Speaker:

The X505 has a single mono speaker. I used the built-in standard 3.5mm stereo out jack to drive headphones and powered speaker.

## WIFI

WIFI capability makes a computer alive. It makes it an extension of our lives rather than just a stand alone unit to store things. At first I was kind of disappointed that Sony did not include an integrated WIFI in the X505. Sony does include a 802.11b/g WIFI card that makes up for it. This WIFI card amazed me with its performance and quality. I compared this PC card with a friend of mine's. Even when both laptops were in the same location, my Sony WIFI card picked up four or five signals where my friend's card only picked up one.

## Battery

Considering the X505 has no internal CD/DVD drive, cooling fans or integrated WIFI, it is not surprising to see that the battery can supply over 2 hours of power to the unit.

## Conclusion:

Sony has in my eyes been the leader in new design and innovations, and the X505 is a good example of what Sony does best. I had a lot of fun with the X505. However, I don't think it's really designed to replace a real laptop. First of all, it's so thin and looks so fragile that I was always worried of breaking it when I took it out of my bag. The keyboard is different enough to need some training before getting comfortable with it. On the other hand, the pleasure of being able to put this inside a portfolio and not having to carry a laptop bag was enough to make me sad when I had to return this. Sleek and light, the X505 is without a doubt one of the art, the luxury car of laptops.

I can see this laptop being taken to business meetings to show presentations, or carrying on business trips where weight is an issue. You pay over \$4000 for this laptop, when you can buy a much faster and more powerful laptop for around \$2000.

## PROS:

This 41 cm thick, eye catching, beautiful design, 2-hour battery life.

## CONS:

Expensive, no modem, no integrated WIFI, no Bluetooth, no CD Drive. ■

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| MS Windows XP Professional         | MS Windows XP Professional         | \$299.99 |
| MS Windows XP Media Center Edition | MS Windows XP Media Center Edition | \$399.99 |
| MS Windows XP Tablet PC Edition    | MS Windows XP Tablet PC Edition    | \$499.99 |
| MS Windows XP Starter Edition      | MS Windows XP Starter Edition      | \$149.99 |

| Processor                 | Price     |
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| MS Windows XP Starter Edition      | \$149.99 |

## Paypal Allows SMEs To Accept Credit Cards With Ease

By Robert Lewis, eBusiness Connection

**A**t eBC, we frequently get inquiries regarding e-commerce and how to process credit card payments online. The majority of these inquiries come from small or start-up businesses looking to sell their niche products on the web. Unfortunately, the cost of setting up an online merchant account to accept credit cards is often prohibitive for many of these new businesses.

One of our roles at eBC is to recommend affordable e-business solutions to small and medium-sized enterprises (SMEs). Often, we suggest PayPal - [www.paypal.com](http://www.paypal.com) - as a logical choice for new SMEs that want to get started selling online. Unless you are a regular eBay user or a routine online shopper, you may not have heard of PayPal, an easy-to-use real-time payment solution that is quickly becoming the global standard for online payments. Widespread acceptance of PayPal as a payment method has helped the company become the leading payment network for online auction websites. In fact, PayPal's market dominance was confirmed when they were acquired by eBay last year.

PayPal serves as a payment mechanism between any two people by allowing them to send and receive funds using only their email addresses. Consumers sign up once for the free service - after that, they can use their email address to buy products online securely, conveniently and cost effectively.

For a SME, the advantage of using a billing solution such as PayPal is affordability. Small businesses that are

selling just a single product and do not conduct a high volume of transactions can use PayPal as their e-commerce solution at a fraction of the cost it would take to e-commerce enable their websites.

PayPal is also a great option for SMEs that may not be able to get an online merchant account due to insufficient credit, or poor financial track records, or for SMEs that simply want to test market their product online before going through the rigorous and expensive application process required by banks. Further, PayPal allows SMEs to accept credit cards at very attractive rates. Standard rates for PayPal business and premier accounts are 2.9% plus a 30¢ transaction fee. And, PayPal does not charge set-up fees, monthly fees, or monthly minimums, common with merchant accounts.

For an online consumer, opening a PayPal account and depositing funds into it is free. PayPal users have the option of funding their accounts directly from their bank account or from a credit card. It takes about 3-4 business days to transfer funds from a bank account to a PayPal account. Transferring funds from a PayPal account back to a bank account works in exactly the same manner, each transaction takes 3-4 business days, however, there is a transfer fee of \$0.45 for Canadian bank accounts. If you prefer, you can deposit funds immediately into your PayPal account via a credit card. Registering your credit card with PayPal ensures that funds will be available for deposit into your PayPal account up to the personal limit on the card.

Not only is PayPal a great way to send and receive money over the Internet, it is also flexible enough to serve as a complete billing solution for SMEs. It provides a variety of e-commerce solutions that can be integrated into your website in a few easy steps. For example, a simple 'purchase' button can be placed on your website. Once a visitor decides to make a purchase, all they have to do is click on the button and submit their information. That button sends the request to PayPal where the transaction is processed. And, if your business sells multiple products and services, PayPal can even provide you with a shopping cart solution free of charge.

Finding a cheap and efficient e-commerce solution is critical for success in cyberspace. Credit cards remain the most popular method of purchasing goods and services online and PayPal is a cheap and effective way of allowing your customers to put their purchases on their credit card. The PayPal name also lends the responsibility of a strong reputation - something that is extremely important in attracting customers that are somewhat reluctant to engage in e-commerce.

With over 25 million users and 3 million business users, PayPal continues to build on its strong reputation as an online payment solution. With an account base growing by 28,000 users a day, PayPal continues to be a solid choice as an online payment system for SMEs interested in getting started selling online. ■

# Personal Home Studios: A Primer

by Alphonse Leung

Digital audio recording has become so easy and affordable that virtually anyone with a good idea now has the ability to create a high-quality finished product without going to an expensive commercial recording studio. So what are the essential elements for someone who wants to produce music at home? What are the benefits and pitfalls of working in the digital realm? Here is a first look at what it takes to create your own personal recording environment.

## Hardware

A big portion of your budget should go towards creating as pristine a signal chain as possible. The basic signal chain is instrument/microphone to preamp to digital audio converter (DAC).



Tascam US-122 (Fig. 1)

No doubt about it, the quality of your DAC will ultimately determine how well your final output will sound. Fortunately, there are many inexpensive audio interfaces that will do the job nicely. Most now feature 24-bit converters and built-in microphone preamps. The Tascam US-122 (Fig. 1), about \$269 Cdn, is an especially nice unit that you can use in conjunction with a notebook computer (via USB cable) for a total mobile recording solution. With a good, reasonably priced condenser microphone like the Studio Projects B1 (Fig. 2), about \$130 Cdn, you can capture pristine performances anywhere, anytime. Recording on the road is quite common now, apparently. Bryan Adams

recorded many of his latest album's vocal tracks in hotel rooms across Europe!

Studio Projects B1  
Microphone (Fig. 2)



At the center of your studio, you will need a fairly powerful computer with a big, fast hard drive. Fortunately, most computers built in the last few years have more than enough processing power and hard drive capacity to handle digital audio

recording. Whether you use a Mac or PC has become rather irrelevant now as most digital audio hardware—and software manufacturers accommodate both platforms very well. What is crucial is that your machine must be optimally tuned and streamlined for digital audio recording. Important factors include turning off unnecessary programs, regular disk defragmentation, and using the latest drivers. In digital recording, it's not just CPU speed and disk size that counts; you must have a consistently reliable coordination of all the parts. You don't want clicks and pops in your audio while you're recording a critical vocal track!

If you play keyboards and/or guitars, make sure the audio interface you choose can handle MIDI and audio well together. Noise is often an issue, so the higher the signal-to-noise ratio,

the more immaculate your recordings will be. Keep in mind that many of these audio interfaces require the operating system to be up-to-date.

## Software

On the software side, there are an endless number of programs that vary in complexity and price. Most now feature cool plug-ins that can provide effects for tube amplifier simulation, reverb, delay, compression, EQ, and ward hard-to-describe colorations!



Propellerhead Reason (Fig. 3)

Quite popular now is Propellerhead's Reason (Fig. 3) and Ableton Live. These mid-priced applications (around \$600 US) allow you to use loops and software synthesizers. 'Soft synths', as they're affectionately called, allow you to use a MIDI keyboard to access an incredible range of faithfully recreated instruments. Very cool-looking, these programs look and function a lot like hardware so they are quite intuitive to use. Particularly suited for the musician

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who doesn't want to be bogged down too much by technical details, these programs can enable you to put a decent track together as quickly as you can imagine it!

Moving up in price (over \$1000 US), we enter the realm of powerful sequencers like Emage's Logic Audio Platinum and Steinberg's Nuendo. These are complete professional packages that are used by top recording artists and commercial producers. Offering great flexibility and control, these applications have a robust feature set to satisfy the most demanding producers. These have higher learning curves so you have to be prepared to invest a good chunk of time to fully make use of all the functions.

### Putting it all together.

Deciding what gear to get will ultimately depend on what your aims are. Are you planning to record a full-length CD? Just have a tune you'd like

to play around with? Recording a birthday song for your niece?

A good basic setup can be created for under \$2000. If you already own a computer, then you may only need to spend about \$1000. Here is a listing of components with a few suggested options. At minimum, you should get:

- 1) audio interface (M-Audio Audiophile, Tascam US-122, Bluel U4-20),
- 2) microphone (Rode NT1, Studio Projects B1, Apex 460, Behringer B1),
- 3) software (ProPELLerhead Reason, Ableton Live, cakewalk Sonar)
- 4) fast computer;
- 5) quiet, secluded place to make noise-

Some nice additions:

- 1) MIDI keyboard (M-Audio Oxygen & Redfire),
- 2) electric guitar (Fender, Gibson, Epiphone);
- 3) studio toys (compressor, valve

equalizer, exotic preamps)

The great thing is that the difference in sonic quality between an expensive component and a low-priced component is shrinking rapidly. Parts recorded off-handedly in a low-cost environment often end up on the final released track. In fact, many top producers and artists prefer to work in the comfort of a bedroom or basement, only offering a full-blown studio for live drums and sweet acoustic spaces. Thus, a caveat: for live recording, you will always need a good-sounding environment, preferably with carpeted or padded walls and away from extraneous noise (like traffic and crickets).

And you will still need good ideas, talented performances, and knowledgeable sound engineering. Be careful not to let seductive digital toys deceive you: it still takes imagination and dedication to truly create from the heart. ■



## Online Payment Processing Explained In Plain English

By Sharna Daniels, eBusiness Connection

**A**s a small business owner wanting to sell your wares over the Internet, it may seem that the thought of navigating your way through the maze of accepting and processing online customer payments is akin to having a tooth extracted without anesthesia – a painful and tortuous process indeed. We at eBC whole-heartedly agree, and due to a number of recent queries about this very complex subject we figured it was time to do a little research and set the record straight about online payment processing. In a nutshell, here's what we found:

### Online Merchant Accounts

An online merchant account is an account set up through a bank or credit processing company to accept and process online credit card orders. In

effect, monies from your online sales are deposited into your merchant account.

Not all banks have the ability to process all types of credit cards in all currencies. Therefore, it is not unusual for a merchant who, for example, wants to process both Visa and MasterCard orders in both Canadian and US funds to hold a merchant account at more than one financial institution in order to get the job done.

That said, 'one-stop' multi-card organizations are becoming more popular, as banks attempt to streamline the account application process. For example, Merivest, a joint venture between Royal Bank and the Bank of Montreal, and Global Payments, a joint CIBC and National Bank of Canada venture, assign one merchant account for both MC and Visa processing.

### How do I get an Online Merchant Account?

Merchant accounts are obtained via a formal application process through the merchant services department of a bank or an acquiring financial institution. Think of a merchant account as a form of credit – this means your financial institution will assess your credit to see if your company's worth the risk. Therefore, they usually require a year or two of financial statements – if you are a start-up you most certainly need a comprehensive business plan which outlines, in detail, your Internet sales venture.

We have heard that some banks may not be comfortable extending this kind of 'credit' to e-commerce entrepreneurs for fear of the virtual nature of the online sales process – so





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don't be surprised if your bank is hesitant. The bottom line here is that banks consider businesses that conduct sales over the Internet as very high risk.

If you are going to use the Internet as your primary sales method, your bank will most likely require that you provide a security deposit. Depending on the nature of your business, how long you've been in business, and how much of your business is conducted over the Internet this can be incredibly high – up to 3 or 4 months of revenue. That said, if you do have a store front location in addition to your virtual store, your risk level comes down and so will the necessary deposit.

The financial institution you choose may expect that you open a business account with them, so if you already have an established account with a particular institution you may want to try them first.

#### Payment Gateways

Once you've been approved for a merchant account, you will also need a payment gateway – this is an organization with a secure server that will accept your credit card orders online. Banks require that payment gateways are certified and most banks will suggest one or two that they work with – although

you are not restricted to their list.

#### Fees

Yes, there are a lot of them. Expect to pay an application fee up front. If your application is accepted, expect to pay a registration fee and then a percentage called a discount fee or discount rate on every sales transaction. Your discount rate will depend on your sales volume and the cost of your average transaction.

If you choose to open a merchant account with a bank at which you do not have a business account, expect to pay something called a push funds fee every time your funds are transferred into your business account at your financial institution.

In addition to merchant account fees, there are payment gateway service charges and set up fees along with payment gateway per transaction service fees.

#### Payment Processing Alternatives

Frustrated? Discouraged? We're not surprised. Maybe this will help. There are alternatives to applying for an on-line merchant account directly through a bank. For example, you might want to try a private Internet payment processing company. Private processing

organizations such as Victoria-based Beamstream.com generally offer less rigid financial requirements, speed up application processes and do not require an up-front deposit – though in return they may charge higher fees for their services.

In fact, Internet payment companies with 'master' merchant account status may act as both merchant account providers and payment gateways so that the process is further streamlined to let you get back to what you do best – grow your business!

And finally, there are also peer to peer money transfer systems such as PayPal which don't require a merchant account at all but do require both buyer and seller to subscribe to their service.

Looking for a merchant account provider or payment gateway? Here is a partial listing guide:

- Moneris [www.moneris.com](http://www.moneris.com)
- PEGATE [www.pegate.com](http://www.pegate.com)
- Beamstream [www.beamstream.com](http://www.beamstream.com)
- GlobalPay [www.globalpaymentsinc.com/Canada](http://www.globalpaymentsinc.com/Canada)
- Internet Secure [www.internetsecure.com](http://www.internetsecure.com)
- Scotia Bank [www.scotiabank.com](http://www.scotiabank.com)
- TD Canada Trust [www.onlinemart.ca](http://www.onlinemart.ca)
- E-Sact [www.e-sact.com](http://www.e-sact.com) ■

### Edifier S5.1 Super Theater System Continued from page 16

these are issues that apply to speakers in general – not just this unit. Specifically, the cables that connect to the computer are colour coded – but the colours on the cables didn't match those on my motherboard: a) green to green – front left and right, b) yellow to orange – centre / sub, c) blue to purple – rear left & right.

In addition the supplied 6 head (3 pairs of white and red cable) cable isn't keyed so it's easy to connect it incorrectly because there are only red/white pairs. It would have been excellent if they had been colour coded green/green white, blue/blue white, yellow/yellow white, on the cables and

on the sub / amplifier, and from the sub / amplifier to the speakers.

Overall summary, budget priced luxury sound system performs flawlessly and is much better product than anything else being offered now. After comparing the sound and the technical specifications of the system to others on the market we realized we had a winner on our hands. We liked this product so much we are giving it our coveted Outstanding Product Award.

#### Features:

- All MDF wood enclosure, including the satellites, much better resonance than the plastic used by other manufacturers.
- Magnetically shielded drivers, does not interfere with computer monitors

- 8 inch Long-Throw super woofer with 50W RMS high power output amplifiers
- 4 inch mid-range drivers and 1/4 inch cloth dome tweeters in every satellite.
- Micro-Computer controlled, digital volume IC.
- VFD wide display, infrared remote controller and front panel key controls.
- Volume fade-in and fade-out when power is switched on/off
- Flash memory to save the adjusted system values
- High-power driver, with high-current Toroidal ring transformer.
- 6.1 channel inputs, Dolby Digital(AC-3) ready, DTS ready, can be updated to EXOS I system. ■



## Sony DSC-P150 Digital Camera

By Babak Khosravi



### Specs:

- T2 effective Megapixels
- Aluminum body (150g)
- Carl Zeiss Vario-Tessar lens (3x optical zoom)
- F2.8-12, 30-140mm (35mm equivalent)
- Flash mode: auto/forced on/forced off/slow sync
- Flash effective range: 3 ~ 3.5 m
- Smart zoom 0 ~ 14.5x (at VGA resolution)
- Approx. No. of shots/SDRAM (low) 320 shots / 2 hrs 40 min. (MP/Hi)
- 18" LCD (104,000 dots)
- Manual Exposure Function
- Red Imaging Processor
- Connectivity: less compatibility via adapter
- Smile Selection (9 modes)
- Burst Mode: On (7 Mega/Pixel, 120s (VGA/Standard) (9.9 fps)
- Histogram Indicator
- ISO Speed/Print (Redfinder)
- Memory Stick / Memory Stick PRO (32MB Memory)

**S**ony's new Cyber-shot DSC-P150 is the world's first compact point-and-shoot digital camera loaded with 7.2 mega pixel for a of price of approximately \$500. The DSC-P150 features Carl Zeiss Vario-Tessar lens with 3x optical zoom. The Real Imaging Processor, ensures fast start-up and extra speed and performance behind automatic features such as auto focus and auto exposure.

### Modes, Options, and Features

The P150 is limited in manual settings. Basic settings such as red-eye, image size and flash settings can be modified. The manual mode allows adjustments to the shutter speed and aperture settings. Scene mode has 9 modes to choose from. In the multi-burst mode, the camera can shoot 16 320 x 240 frames. The 5 shot burst mode captures 5 to 100 shots at 1/41 frames per second.

### Movie Mode

The P150 has one of the best movie modes I've seen within digital cameras. The size of the movie is limited only by memory space on your card. There is a built-in mic and speaker. There are recording options of 640x480 at 30 fps, at 15 fps or 160x112 at 8 fps. The movies are all recorded with audio. The video quality is great, but the audio I was getting was not the video's match. The P150 can even play back the movies with sound.

### Picture and file size

Overall, the pictures taken on the P150 are incredible. All

images are saved in JPEG format with a choice of either standard or fine compression settings. The P150 at its highest resolution setting can yield an image size of 3072 x 2304; enough pixels to make a 300 dpi 8 by 10 enlargement. An image taken at the highest resolution setting will take up to 3 MB of space on your memory card. The flash could have been more powerful. Pictures taken at night were not as sharp as the ones taken in daylight.

### Battery

The P150 utilizes a proprietary lithium-ion battery. Sony claims the battery should allow for 320 shots before recharge. I got about 200 shots, but I was using flash on a regular basis. Still, that's pretty good and the chances of the battery leaving you hanging without a charge are pretty low. As with most Sony DSC cameras, the battery charges inside the camera, so you just have to plug the camera in.

### Conclusion:

This is a camera meant for beginners but with some limited manual controls. I loved the macro feature with the P150. I could get the camera right up close to the subject. As for the response time, this camera is so fast. I would turn it on, and it would be up and running within 1 second, another half second to take the picture, and then one second to turn it off. So it was taking less than 3 seconds to take a picture and turn the camera off as well. The look and feel of the camera is very nice. It is very compact and light, without jeopardizing the quality of the pictures. This is a great deal for a 7 MP camera. If you are looking for a high quality camera with mostly automatic features, this is the right camera for you. To get more information on this camera, check out [www.sonystyle.com](http://www.sonystyle.com).

### Pros:

Small size, 7 mega pixels, camera settings are more or less automatic, decent battery life, 3 point auto focus, movie mode with audio, 3x optical zoom and 14x digital zoom,

### Cons:

Low powered flash, 0



### Beta Launch of New MSN Search Service



The search engine wars are heating up. On November 11, MSN unveiled a beta version of its new MSN Search service. Sporting a Google-like stepped-down interface, the new site can provide relevant answers to direct questions and supply information and resources that are geographically close to home.

"The release of our beta is a huge step toward delivering the information consumers are looking for online, faster than previous versions of MSN Search," said Yusuf Mehdi, corporate vice president for the MSN Information Services & Merchant Platform division at Microsoft Corp. "With better results and more powerful search tools, MSN Search is creating a new, higher standard for online search -- one that helps consumers find the information they need, when they need it." You can decide for yourself if the new MSN Search is all it's cracked up to be at <http://beta.search.msn.com>.

### Samsung's New 4-inch Screen for Portable Media Players

On November 3, 2004, Samsung Electronics, the world's largest provider of TFT-LCD display panels, announced that it had developed a 4-inch screen digital interface LCD with a 16:9 screen ratio exclusively for Portable Media Players (PMP). PMP is a next-generation multimedia player that can play video images downloaded from the Internet at any time, any where in a convenient format. Market anticipation for a full scale portable video player has increased dramatically in recent months. PMP's expanded capacity allows for variety of media player features including music and video.



### Controversial Video Game Based on Kennedy Assassination

You may want to think twice before getting this item for your kids this Christmas.

In mid-November, Scottish video game company Traffic Management Limited released JFK Reloaded, a game that re-creates the John F. Kennedy assassination.



Vividly depicting the presidential limousine as it cruises through Dealey Plaza in Dallas and allowing the player to fire at the president from Oswald's perch in the School Book Depository building, the game has drawn harsh criticism from both politicians and the general public. Through a spokesperson, Senator Edward Kennedy, brother of the late president, has called it "despicable."

Kirk Ewing, Traffic's managing director, says the purpose of the game is to provide a realistic environment for users to test the lone gunman theory. The gamer who can most accurately replicate Oswald's shooting on November 22, 1963, can win up to \$100,000. "We genuinely believe that if we get enough people participating we'll be able to disprove once and for all any notion that someone else was involved in the assassination of President Kennedy," claims Ewing. But Charity Glaube from Children NOW, a group promoting safer media for children, states, "I would think the only [lesson it teaches] is how to be an assassin."

You can download a demo version at <http://www.jfkreload.net/>, but, be advised, some images may be offensive and ghoulish.

### West Coast Security Forum

By Marco Pasi

Held this year at the Western Bayshore on Monday, November 22, the forum presented key industry speakers, Phil Zimmermann, creator of PGP and Rob Clyde CTO of Symantec.

Information sessions covered the core areas of computing security from securing wireless communications, attacks from hackers and viruses, security solutions and creating business/company security standards. The event was sponsored by a conglomerate of corporation headliners like Microsoft, Symantec, Deloitte, Grant Thornton, and Securus, with help from Canadian federal ministries of Industry and International Trade. (visit the website <http://www.wscf.com>).

But the real excitement for me as an observer, had to definitely come from the Innovation Pavilion. The Pavilion participants were selected on the criteria of 4 key factors: innovative concept, relative new company (under 2 years), small business (under 200 employees), local (BC) R&D. This small elite group of seven BC-based companies have developed some very interesting technologies focused on security of communications.

Among this group is Layer 7 Technologies (<http://www.layer7tech.com>).

with their product SecureSpan. Targeted to larger complex multiple participant environments, this product simplifies web services security policies integration from a programmer's job to that of a security manager.

Whitsonic Laboratories Inc. (<http://www.whitsonic.com>), has developed a security product, able to withstand supercomputer attacks with a speed of 10 megabytes in .5 seconds (more than 3 times faster than it's closest competitor) using an USB interface. This file security device can encrypt any kind of data, and de-encrypt simultaneously.

OraFlow™ from Cetacea Networks (<http://www.oraflow.ca>), focuses on eliminating malicious network traffic by creating a reliable and effective DDoS and Internet worm detection grid. The OraFlow technology alerts in seconds branches to the security enabling IT security policy to buzz into action.

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